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Substitute for form 1448A/PTO		Complete If Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/076,486		
		Filing Date	February 19, 2002		
		First Named Inventor	Stephen L. Casper		
		Art Unit	2818		
		Examiner Name	M. Tran		
Sheet	1	of	4	Attorney Docket Number	M4065.0479/P479

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number-Kind Code ² (if known)				Class	Sub
MT	AA	6,469,364		10/2002	Kozicki	257	529
	AB	2002/0168820 App.		11/2002	Kozicki		
	AC	2000/0072188 App		6/2002	Gilton		
	AD	2002/0123169 App		9/2002	Moore et al.		
	AE	2002/0123248 App.		9/2002	Moore et al.		
	AF	3,622,319		11/1971	Sharp	430	396
	AG	3,743,847		7/1973	Boland	250	505.1
	AH	4,269,935		5/1981	Masters et al.	430	323
	AI	4,312,938		1/1982	Drexler, et al.	430	496
MT	AJ	4,316,946		1/1982	Masters, et al.	430	9
	AK	4,320,191		3/1982	Yoshikawa et al.	430	296
	AL	4,405,710		9/1983	Balasubramanyam et al.	430	311
	AM	4,419,421		12/1983	Wichelhaus, et al.	429	323
	AN	4,795,657		1/1989	Formigoni et al.	427	96
	AO	4,847,674		7/1989	Sliwa et al.	257	767
	AP	4,499,557		2/1985	Holmberg et al.	365	163
	AQ	5,177,567		1/1993	Klersy et al.	257	4
	AR	5,219,788		6/1993	Abernathey et al.	438	636
MT	AS	5,238,862		8/1993	Blalock et al.	438	398
	AT	5,315,131		5/1994	Kishimoto et al.	257	57
	AU	5,350,484		9/1994	Gardner et al.	438	669
	AV	5,360,981		11/1994	Owen et al.	257	4
	AW	5,512,328		4/1996	Yoshimura et al.	427	498
	AX	5,512,773		4/1996	Wolf et al.	257	471
	AY	5,726,083		3/1998	Takaishi	438	210
	AA1	5,841,150		11/1998	Gonzalez et al.	257	3
	AB1	5,846,889		12/1998	Harblson et al.	501	40
MT	AC1	5,920,788		7/1999	Reinberg	438	466
	AD1	5,998,066		12/1999	Block et al.	430	5
	AE1	6,077,729		6/2000	Harshfield	438	128
	AF1	6,117,720		9/2000	Harshfield	438	238
	AG1	6,143,604		11/2000	Chiang et al.	438	253
	AH1	6,177,338		1/2001	Liaw et al.	438	629
	AI1	6,236,059		5/2001	Wolstenholme et al.	257	3
	AJ1	6,297,170		10/2001	Gabriel et al.	438	738
	AK1	6,300,684		10/2001	Gonzalez et al.	257	774
	AL1	6,316,784		11/2001	Zahorik et al.	257	3
	AM1	6,329,606		12/2001	Freyman et al.	174	260
	AN1	6,350,679		2/2002	McDaniel et al.	438	634
MT	AO1	6,376,284		4/2002	Gonzalez et al.	438	129
	AP1	6,391,688		5/2002	Gonzalez et al.	438	128
	AQ1	6,414,376		7/2002	Thakur t al.	257	640
	AR1	6,423,628		7/2002	Li et al.	438	622
	AS1	6,487,106		11/26/2002	Kozicki	365	153
	AT1	5,314,772		5/24/1994	Kozicki	430	14



PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>		Application Number	10/076,486		
		Filing Date	February 19, 2002		
		First Named Inventor	Stephen L. Casper		
		Art Unit	2818		
		Examiner Name	M. Tran		
Sheet	2	of	4	Attorney Docket Number	M4065.0479/P479

✓	AU1	2002/0190350 APP	12/19/2002	Kozicki		
	AV1	2003/0027416 APP	2/6/2003	Moore		
	AW1	2003/0001229 APP	1/2/2003	Moore et al.		
	AX1	2002/0106849 APP	8/8/2002	Moore		
	AY1	2002/0127886 APP	9/12/2002	Moore et al.		
✓	AZ1	2002/0123170 APP	9/5/2002	Moore et al.		
	BA1	2002/0163828 APP	11/2002	Krieger et al		
	BB1	6,072,716	6/2000	Jacobson et al.	365	163
	BC1	5,272,359	12/93	Nagasubramanian et al.	257	40
	BD1	4,671,618	6/87	Wu et al.	349	92
	BE1	4,800,526	1/89	Lewis	365	118
✓	BF1	2003/0035314	02/20/03	Kozicki		
	BG1	2003/0035315	02/20/03	Kozicki		
	BH1	6,314,014	11/6/01	Lowrey et al.	365	100
	BI1	5,883,827	3/16/99	Morgan	365	100
✓	BJ1	4,112,512	9/5/78	Arzubi et al.	365	149



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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
		Country Code ² -Number ³ -Kind Code ⁴ (if known)					
BT	BA	JP 56126916		10/1981	Akira et al.		
	BB						

Examiner Signature	M. TRAN	Date Considered	6/30/04
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	4	of	4	Attorney Docket Number	M4065.0479/P479
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Complete if Known

Application Number	10/076,486
Filing Date	February 19, 2002
First Named Inventor	Stephen L. Casper et al.
Group Art Unit	2818
Examiner Name	M. Tran
Attorney Docket Number	M4065.0479/P479

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
elt	CA	Axon Technologies Corporation, TECHNOLOGY DESCRIPTION: <i>Programmable Metalization Cell(PMC)</i> , pp. 1-6 (Pre-May 2000).	
	CB	Helbert et al., <i>Intralevel hybrid resist process with submicron capability</i> , SPIE Vol. 333 SUBMICRON LITHOGRAPHY, pp. 24-29 (1982).	
	CC	Hilt, DISSERTATION: <i>Materials characterization of Silver Chalcogenide Programmable Metalization Cells</i> , Arizona State University, pp. Title page-114 (UMI Company, May 1999).	
	CD	Hirose et al., <i>High Speed Memory Behavior and Reliability of an Amorphous As₂S₃ Film Doped Ag</i> , PHYS. STAT. SOL. (a) 61, pp. 87-90 (1980).	
	CE	Holmquist et al., <i>Reaction and Diffusion in Silver-Arsenic Chalcogenide Glass Systems</i> , 62 J. AMER. CERAM. SOC., No. 3-4, pp. 183-188 (March-April 1979).	
my	CF	Huggett et al., <i>Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF₆</i> , 42 APPL. PHYS. LETT., No. 7, pp. 592-594 (April 1983).	
	CG	Kawaguchi et al., <i>Mechanism of photosurface deposition</i> , 164-166 J. NON-CRYST. SOLIDS, pp. 1231-1234 (1993).	
	CH	Kolobov and Elliott, <i>Photodoping of Amorphous Chalcogenides by Metals</i> , Advances in Physics, Vol. 40, No 5, 625-684 (1991).	
	CI	Kozicki, et al., <i>"Applications of Programmable Resistance Changes in Metal-doped Chalcogenides"</i> , Proceedings of the 1999 Symposium on Solid State Ionic Devices, Editors - E.D. Wachsman et al., The Electrochemical Society, Inc., 1 - 12 (1999).	
	CJ	Kozicki, et al., <i>Nanoscale effects in devices based on chalcogenide solid solutions</i> , Superlattices and Microstructures, 27, 485-488 (2000).	
my	CK	Kozicki, et al., <i>Nanoscale phase separation in Ag-Ge-Se glasses</i> , Microelectronic Engineering, vol. 63/1-3, 155-159 (2002).	
	CL	M.N. Kozicki and M. Mitkova, <i>Silver incorporation in thin films of selenium rich Ge-Se glasses</i> , Proceedings of the XIX International Congress on Glass, Society for Glass Technology, 226-227 (2001).	
	CM	McHardy et al., <i>The dissolution of metals in amorphous chalcogenides and the effects of electron and ultraviolet radiation</i> , 20 J. PHYS. C.: SOLID STATE PHYS., pp. 4055-4075 (1987) ^f	
	CN	Owen et al., <i>Metal-Chalcogenide Photoresists for High Resolution Lithography and Sub-Micron Structures</i> , NANOSTRUCTURE PHYSICS AND FABRICATION, pp. 447-451 (M. Reed ed. 1989).	
	CO	Shimizu et al., <i>The Photo-Erased Memory Switching Effect of Ag Photo-Doped Chalcogenide Glasses</i> , 46 B. CHEM SOC. JAPAN, No. 12, pp. 3662-3365 (1973).	
	CP	Michael N. Kozicki, <i>1. Programmable Metallization Cell Technology Description</i> , February 18, 2000	
my	CQ	Michael N. Kozicki, Axon Technologies Corp. and Arizona State University, Presentation to Micron Technology, Inc., April 6, 2000	

Examiner Signature	u. TRAN	Date Considered	6/30/04
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^fEXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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PTO/SB/08a/b (08-03)
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			Application Number	10/076,486	
			Filing Date	February 19, 2002	
			First Named Inventor	Stephen L. Casper	
			Art Unit	2818	
			Examiner Name	M. Tran	
Sheet	1	of	3	Attorney Docket Number	M4065.0479/P479

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
MS	A	US 2004/0035401	2/2004	Ramachandran et al.		
	B	US 2003/0212724	11/2003	Ovshinsky et al.		
	C	US 2003/0048744	3/2003	Ovshinsky et al.		
	D	US 2003/0212725	11/2003	Ovshinsky et al.		
	E	US RE 37,259E	7/2001	Ovshinsky		
	F	US 3,271,591	9/1966	Ovshinsky	327	500
	G	US 3,961,314	6/1976	Klose et al.	365	113
	H	US 3,966,317	6/1976	Wacks et al.	355	19
	I	US 3,983,542	11/1976	Ovshinsky	365	113
	J	US 3,988,720	10/1976	Ovshinsky	365	113
MS	K	US 4,177,474	12/1979	Ovshinsky	252	62
	L	US 4,267,261	5/1981	Hallman et al.	430	322
	M	US 4,597,162	7/1986	Johnson et al.	438	16
	N	US 4,608,296	8/1986	Keem et al.	438	215
	O	US 4,637,895	1/1987	Ovshinsky et al.	252	372
	P	US 4,646,266	2/1987	Ovshinsky et al.	365	105
	Q	US 4,664,939	5/1987	Ovshinsky	438	62
	R	US 4,668,968	5/1987	Ovshinsky et al.	257	61
	S	US 4,670,763	6/1987	Ovshinsky et al.	257	57
	T	US 4,673,957	6/1987	Ovshinsky et al.	257	58
MS	U	US 4,678,679	7/1987	Ovshinsky	427	562
	V	US 4,696,758	9/1987	Ovshinsky et al.	252	501.1
	W	US 4,698,234	10/1987	Ovshinsky et al.	438	62
	X	US 4,710,899	12/1987	Young et al.	365	113
	Y	US 4,728,406	3/1988	Banerjee et al.	204	192.29
	Z	US 4,737,379	4/1988	Hudgens et al.	427	575
	A1	US 4,766,471	8/1988	Ovshinsky et al.	257	53
	B1	US 4,769,338	9/1988	Ovshinsky et al.	438	151
	C1	US 4,775,425	10/1988	Guha et al.	136	249
	D1	US 4,788,594	11/1988	Ovshinsky et al.	348	64
	E1	US 4,809,044	2/1989	Pryor et al.	257	3
	F1	US 4,818,717	4/1989	Johnson et al.	438	130
MS	G1	US 4,843,443	6/1989	Ovshinsky et al.	257	59
	H1	US 4,845,533	7/1989	Pryor et al.	257	4
	I1	US 4,853,785	8/1989	Ovshinsky et al.	348	302
	J1	US 4,891,330	1/1990	Guha et al.	438	488
	K1	US 5,128,099	7/1992	Strand et al.	420	579
	L1	US 5,159,661	10/1992	Ovshinsky et al.	206	33
	M1	US 5,166,758	11/1992	Ovshinsky et al.	257	3
	N1	US 5,177,567	1/1993	Kiersy et al.	257	4
	O1	US 5,296,716	3/1994	Ovshinsky et al.	257	3
	P1	US 5,335,219	8/1994	Ovshinsky et al.	364	288
	Q1	US 5,359,205	10/1994	Ovshinsky	257	3
	R1	US 5,341,328	8/1994	Ovshinsky et al.	365	113
MS	S1	US 5,406,509	4/1995	Ovshinsky et al.	365	113



PTO/SB/08a/b (08-03)

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			First Named Inventor	Stephen L. Casper	
			Art Unit	2818	
			Examiner Name	M. Tran	
Sheet	2	of	3	Attorney Docket Number	M4065.0479/P479

Ref	T1	US 5,414,271	5/1995	Ovshinsky et al.	257	3
	U1	US 5,534,711	7/1996	Ovshinsky et al.	257	3
	V1	US 5,534,712	7/1996	Ovshinsky et al.	257	3
	W1	US 5,536,947	7/1996	Klersy et al.	257	3
	X1	US 5,543,737	8/1996	Ovshinsky	326	104
	Y1	US 5,591,501	1/1997	Ovshinsky et al.	428	64.1
	Z1	US 5,596,522	1/1997	Ovshinsky et al.	365	113
Ref	A2	US 5,687,112	11/1997	Ovshinsky	365	163
	B2	US 5,694,054	12/1997	Ovshinsky et al.	326	35
	C2	US 5,714,768	2/1998	Ovshinsky et al.	257	40
	D2	US 5,825,046	10/1998	Czubatyj et al.	257	2
	E2	US 5,912,839	6/1999	Ovshinsky et al.	365	185.03
	F2	US 5,933,365	8/1999	Klersy et al.	365	148
	G2	US 6,011,757	1/2000	Ovshinsky	369	13.35
	H2	US 6,087,674	7/2000	Ovshinsky et al.	257	2
	I2	US 6,141,241	10/2000	Ovshinsky et al.	365	163
	J2	US 6,339,544	1/2002	Chiang et al.	365	163
Ref	K2	US 6,404,665	6/2002	Lowery et al.	365	100
	L2	US 6,429,064	8/2002	Wicker	438	238
	M2	US 6,437,383	8/2002	Xu	257	300
	N2	US 6,462,984	10/2002	Xu et al.	365	175
	O2	US 6,480,438	11/2002	Park	365	230.06
	P2	US 6,487,113	11/2002	Park et al.	365	163
	Q2	US 6,501,111	12/2002	Lowery	257	295
	R2	US 6,507,061	1/2003	Hudgens et al.	257	4
	S2	US 6,511,862	1/2003	Hudgens et al.	438	95
	T2	US 6,511,867	1/2003	Lowery et al.	438	128
	U2	US 6,512,241	1/2003	Lai	257	4
Ref	V2	US 6,514,805	2/2003	Xu et al.	438	164
	W2	US 6,531,373	3/2003	Gill et al.	438	400
	X2	US 6,534,781	3/2003	Dennison	257	5
	Y2	US 6,545,287	4/2003	Chiang	257	3
	Z2	US 6,545,907	4/2003	Lowery et al.	365	163
	A3	US 6,555,860	4/2003	Lowery et al.	257	296
	B3	US 6,563,164	5/2003	Lowery et al.	257	314
	C3	US 6,566,700	5/2003	Xu	257	296
	D3	US 6,567,293	5/2003	Lowery et al.	365	100
Ref	E3	US 6,569,705	5/2003	Chiang et al.	438	95
	F3	US 6,570,784	5/2003	Lowery	365	163
	G3	US 6,576,921	6/2003	Lowery	257	42
	H3	US 6,586,761	7/2003	Lowery	257	3
	I3	US 6,589,714	7/2003	Maimon et al.	438	313
	J3	US 6,590,807	7/2003	Lowery	365	175
	K3	US 6,593,176	7/2003	Dennison	438	200
	L3	US 6,597,009	7/2003	Wicker	257	4
	M3	US 6,605,527	8/2003	Dennison et al.	438	618
	N3	US 6,613,604	9/2003	Maimon et al.	438	95
	O3	US 6,621,095	9/2003	Chiang et al.	257	5
Ref	P3	US 6,625,054	9/2003	Lowery et al.	365	148
	Q3	US 6,642,102	11/2003	Xu	438	257



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Mr	R3	US 6,646,297	11/2003	Dennison	257	296
	S3	US 6,649,928	11/2003	Dennison	257	4
	T3	US 6,667,900	12/2003	Lowery et al.	365	171
	U3	US 6,671,710	12/2003	Ovshinsky et al.	208	493
	V3	US 6,673,700	1/2004	Dennison et al.	438	466
	W3	US 6,674,115	1/2004	Hudgens et al.	257	310
	X3	US 6,687,427	2/2004	Ramalingam et al.	365	163
	Y3	US 6,690,026	2/2004	Peterson	185	16
	Z3	US 6,696,355	2/2004	Dennison	257	4
	A4	US 6,687,153	2/2004	Lowery	438	597
	B4	US 6,707,712	3/2004	Lowery	365	175
	C4	US 6,714,954	3/2004	Ovshinsky et al.	208	200

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NON PATENT LITERATURE DOCUMENTS			
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Attorney Docket Number	M4065.0479/P479

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
MT	AA	6,388,324	05/14/2002	Kozicki et al.	clas 257 sub 750
MT	AB	US 2002/0000666	01/03/2002	Kozicki et al.	A
	AC	5,500,532	03/19/1996	Kozicki et al.	250 372
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	AE	5,751,012	05/12/1998	Wolstenholme et al.	257 5
	AF	5,789,277	08/04/1998	Zahorik et al.	438 130
MT	AG	6,348,365	02/19/2202	Moore et al.	438 130

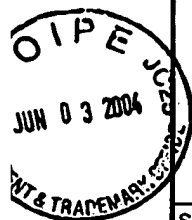
FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
MT	BA	WO 02/21542	03/14/2002	Kozicki et al.		
	BB	WO 00/48196	08/17/2000	Kozicki et al.		
	BC	WO 97/48032	12/18/1997	Kozicki et al.		
MT	BD	WO 99/28914	06/10/1999	Kozicki et al.		

Examiner Signature	M. TRAN	Date Considered	6/30/04
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet	2	of	8	Application Number	10/076,486
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Complete if Known

Filing Date	February 19, 2002
First Named Inventor	Stephen L. Casper
Group Art Unit	2818
Examiner Name	Not Known
Attorney Docket Number	M4065.0479/P479

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RT	CA	Abdel-Ail, A.; Elshafie, A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge ₅ As ₃₈ Te ₅₇ chalcogenide glass, Vacuum 59 (2000) 845-853.	
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	CF	Alekperova, Sh.M.; Gadzhieva, G.S., Current-Voltage characteristics of Ag ₂ Se single crystal near the phase transition, Inorganic Materials 23 (1987) 137-139.	
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Sheet	3	of	8	Attorney Docket Number	M4065.0479/P479
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Application Number	10/076,486
Filing Date	February 19, 2002
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Group Art Unit	2818
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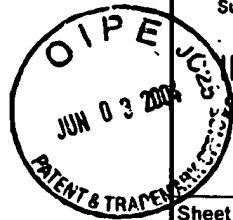
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Application Number	10/076,486
Filing Date	February 19, 2002
First Named Inventor	Stephen L. Casper
Group Art Unit	2818
Examiner Name	Not Known
Attorney Docket Number	M4065.0479/P479

Sheet	4	of	8
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Filing Date	February 19, 2002
First Named Inventor	Stephen L. Casper
Group Art Unit	2818
Examiner Name	Not Known
Attorney Docket Number	M4065.0479/P479

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INFORMATION DISCLOSURE
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Application Number	10/076,486
Filing Date	February 19, 2002
First Named Inventor	Stephen L. Casper
Group Art Unit	2818
Examiner Name	Not Known
Attorney Docket Number	M4065.0479/P479

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